

TCM Meeting 04 Nov 02

Procedures for Cable Labeling

S. Lusin

University of Wisconsin



Labeling overview ...

Austin Ball: proposed labeling scheme at June CMS week

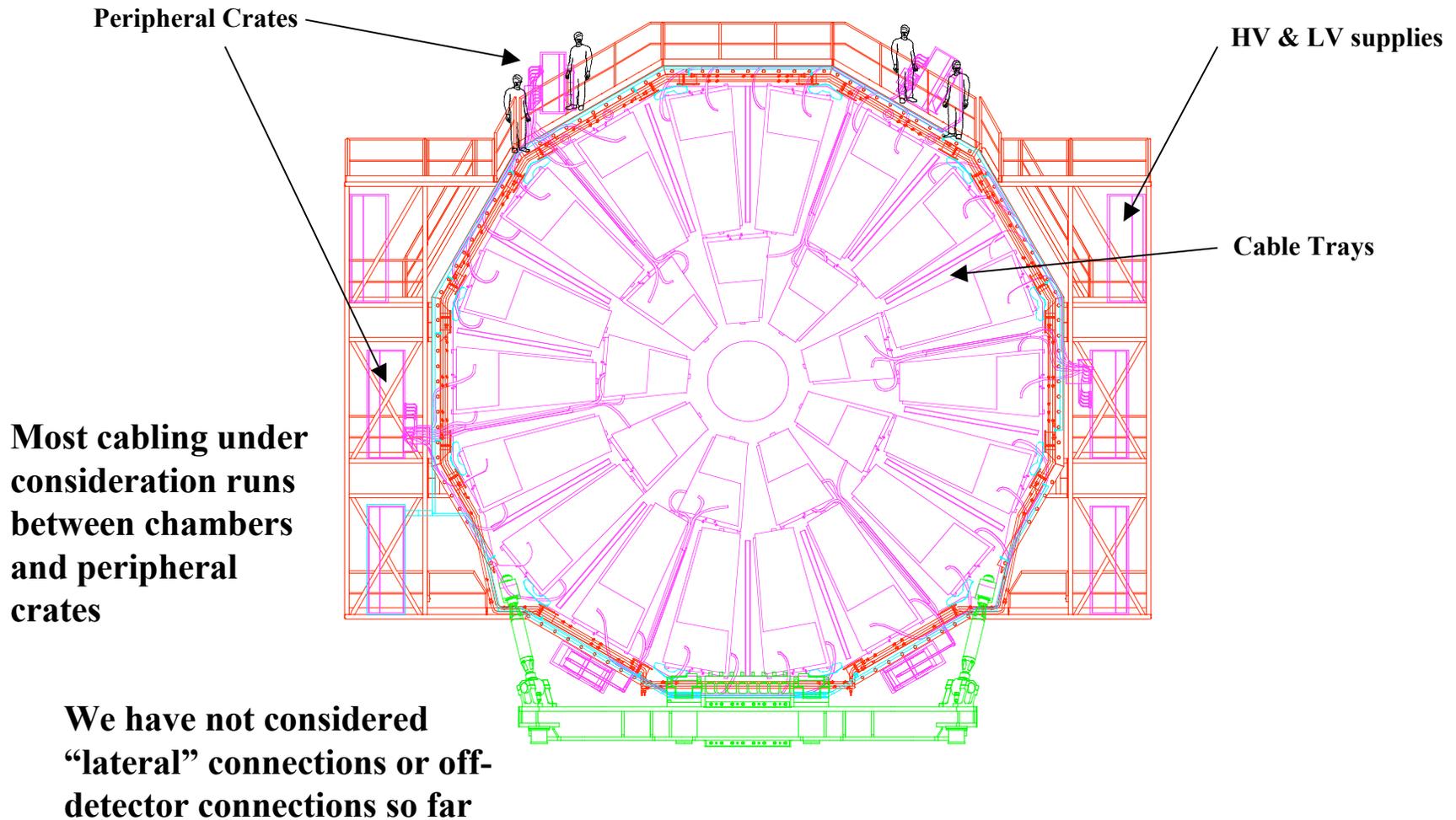
EMU group: CMS IN 2000/004, CMS IN 2002/nnn, descriptions of detector numbering schemes, extending to cable labeling

Cable Species:

- **On-chamber cables**
- **Chamber- peripheral crate cables**
- **Lateral interconnects**
- **Readout cables**



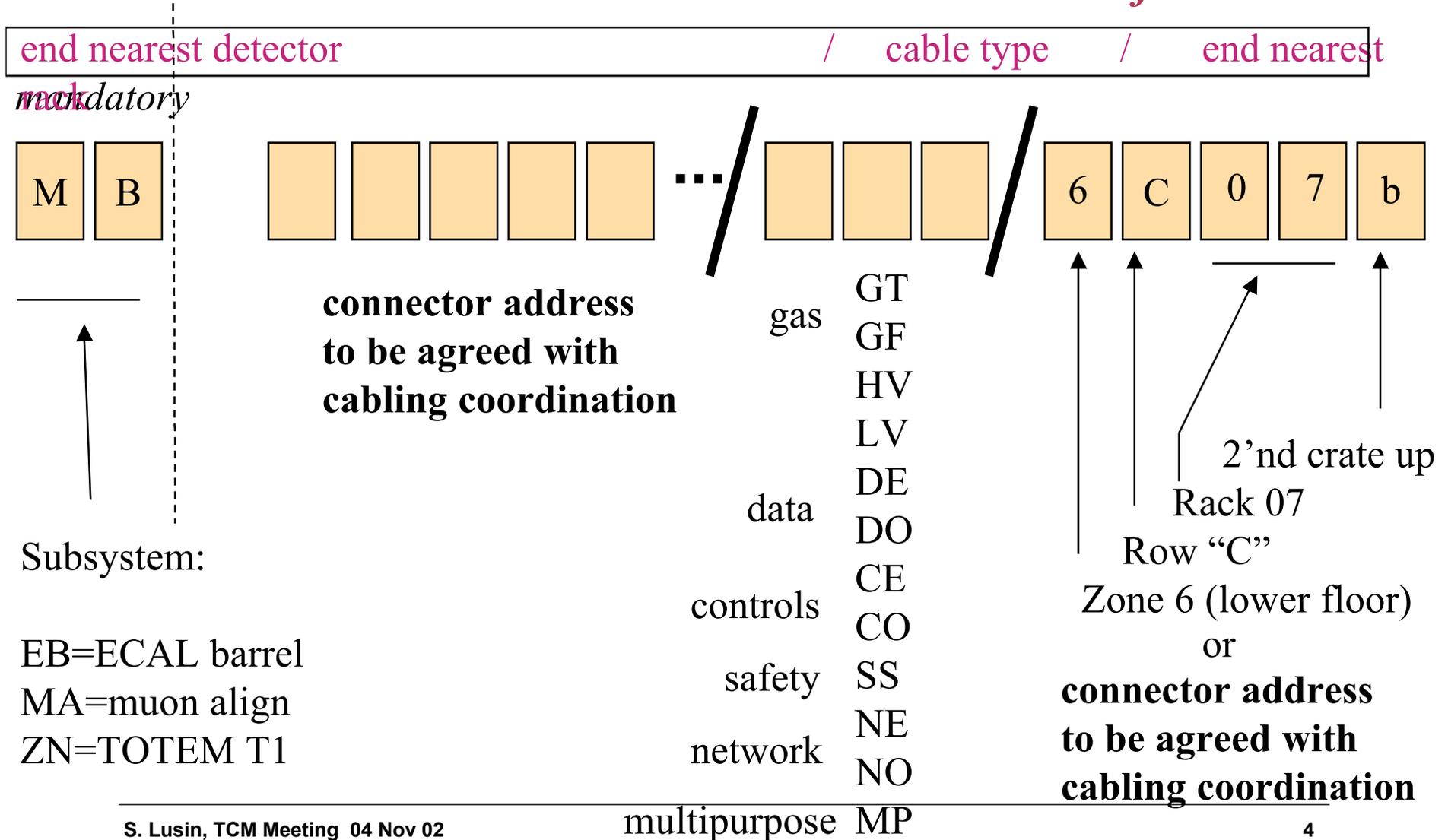
Cable paths- YE2

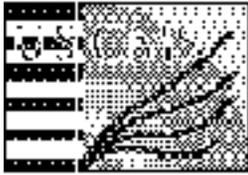




Cable labeling: visual

-from A. Ball





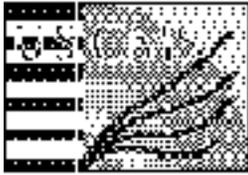
The cabling process ...

Emphasis in cable labeling discussions has been on label syntax, or constructing the label fields

- Can imagine many different approaches that may work
- Label fields should be constructed with global detector conventions in mind

Need to consider how the process of cabling uses the label information

- Look to prior experience- in this case CDF
 - There is one cable coordinator who is the ultimate authority on what cable actually gets strung
 - Nobody runs a cable on their own
 - The cable coordinator maintains a database of all cable connections
 - The cable coordinator *generates the labels used on the cables*



Cable documentation ...

The cable catalog ...

- Maintained by the cabling coordinator
- *Very few* people have write access to the database
- Database allows read access via web

Cabling Request Form ...

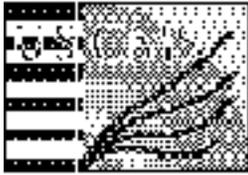
- Standardized format, submitted to cabling coordinator
- Describes cable characteristics, endpoints

Pull sheets ...

- Generated by cabling coordinator, given to cable installation technicians
- Describe cable endpoints, possibly routing
- Checked off during cable installation, returned to cabling coordinator for updating database

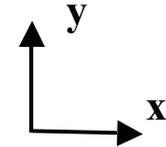
Cartoons ...

- Visual descriptions of clustered source and destination points for a group of cables
- Used in tandem with pull sheets



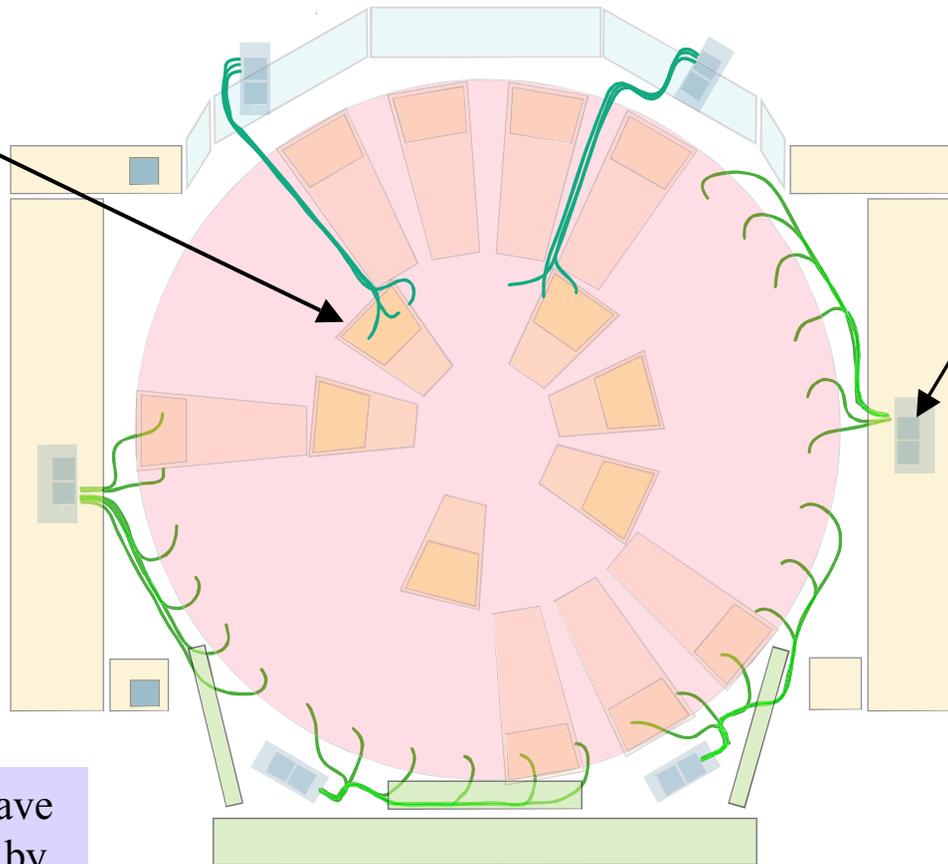
EMU Readout Cables ...

This is what a cartoon may look like ...



CSC zz.a

Ye+2.p3.c1.s3.00	CFEB xxx.2
Ye+2.p3.c1.s3.01	CFEB xxy.1
Ye+2.p3.c1.s3.02	CFEB xxy.2
Ye+2.p3.c1.s3.03	CFEB xyy.1



EMU rack xx, crate yy

Ye+2.p3.c1.s3.00	CFEB xxx.2
Ye+2.p3.c1.s3.01	CFEB xxy.1
Ye+2.p3.c1.s3.02	CFEB xxy.2
Ye+2.p3.c1.s3.03	CFEB xyy.1
Ye+2.p3.c1.s3.04	CFEB xyy.2
Ye+2.p3.c1.s5.00	CFEB yyy.1
Ye+2.p3.c1.s5.01	CFEB yyy.2
Ye+2.p3.c1.s5.02	CFEB xxz.1
Ye+2.p3.c1.s5.03	CFEB xxz.2
Ye+2.p3.c1.s5.04	CFEB xzz.1
Ye+2.p3.c1.s7.00	CFEB xzz.2
Ye+2.p3.c1.s7.01	CFEB zzz.1
Ye+2.p3.c1.s7.02	CFEB zzz.2

Cartoon describes objects to be cabled, cabling routes to use.

In addition, could have fields to be filled in by cabling crew, fields for annotations